

IMPACTS, MITIGATION MEASURES, AND CONCLUSIONS FOR ALTERNATIVE 4 IN THE 2ND ADMINISTRATIVE DRAFT OF THE BDCP EIR/EIS

Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
5	WS-1: Changes in SWP/CVP water deliveries during construction	No impact/ Not adverse		No impact
5	WS-2: Change in SWP/CVP deliveries	Beneficial/ Beneficial		Beneficial
5	WS-3: Effects of water transfers on water supply	--		--
6	SW-1: Changes in SWP or CVP reservoir flood storage capacity	Less than significant/ Not adverse		Less than significant
6	SW-2:Changes in Sacramento and San Joaquin River flood flows	Less than significant/ Not adverse		Less than significant
6	SW-3: Changes in reverse flow conditions in Old and Middle Rivers	Beneficial/ Beneficial		Beneficial
6	SW-4: Substantially alter the existing drainage pattern or substantially increase the rate or amount of surface runoff in a manner that would result in flooding during construction of conveyance facilities	Significant/ Adverse	Mitigation Measure SW-4: Implement measures to reduce runoff and sedimentation	Less than significant
6	SW-5: Substantially alter the existing drainage pattern or substantially increase the rate or amount of surface runoff in a manner that would result in flooding during construction of habitat restoration area facilities	Significant/ Adverse	Mitigation Measure SW-4: Implement measures to reduce runoff and sedimentation	Less than significant
6	SW-6: Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	Significant/ Adverse	Mitigation Measure SW-4: Implement measures to reduce runoff and sedimentation	Less than significant
6	SW-7: Expose people or structures to a significant risk of loss, injury or death involving floodin due to the construction of new conveyance facilities	Less than significant/ Not adverse		Less than significant
6	SW-8: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding due to habitat restoration	Significant/ Adverse	Mitigation Measure SW-8: Implement measures to address potential wind fetch issues	Less than significant
6	SW-9: Place within a 100-year flood hazard area structures which would impede or redirect flood flows, or be subject to inundation by mudflow	Significant/ Adverse	Mitigation Measure SW-4: Implement measures to reduce runoff and sedimentation	Less than significant
6	SW-10: Effects of water transfers on surface water	--		--
7	GW-1: During construction, deplete groundwater supplies or interfere with groundwater recharge, alter local groundwater levels, or reduce the production capacity of preexisting nearby wells	Significant/ Adverse	Mitigation Measure GW-1: Maintain water supplies in areas affected by construction dewatering	Significant
7	GW-2: During operations, deplete groundwater supplies or interfere with groundwater recharge, alter local groundwater levels, or reduce the production capacity of preexisting nearby wells	Less than significant/ Not adverse		Less than significant
7	GW-3: Degrade groundwater quality during construction and operation of conveyance facilities	Less than significant/ Not adverse		Less than significant
7	GW-4: During construction of conveyance facilities, interfere with agricultural drainage in the Delta	Less than significant/ Not adverse		Less than significant
7	GW-5: During operations of new facilities, interfere with agricultural drainage in the Delta	Less than significant/ Not adverse	Mitigation Measure GW-6: Agricultural lands seepage minimization	Less than significant
7	GW-6: Deplete groundwater supplies or interfere with groundwater recharge, alter local groundwater levels, reduce the production capacity of pre-existing nearby wells, or interfere with agricultural drainage as a result of implementing CM2-CM22	Significant/ Adverse	Mitigation Measure GW-6: Agricultural lands seepage minimization	Less than significant
7	GW-7: Degrade groundwater quality as a result of implementing CM2-CM22	Significant/ Adverse	Mitigation Measure GW-7: Provide a cleaner or alternate source of water	Significant and unavoidable

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7	GW-8: During operations, deplete groundwater supplies or interfere with groundwater recharge, alter groundwater levels, or reduce the production capacity of pre-existing nearby wells	Significant/ Adverse		Significant and unavoidable
7	GW-9: Degrade groundwater quality	Significant/ Adverse		Significant and unavoidable
7	GW-10: Result in groundwater level-induced land subsidence	Less than significant/ Not adverse		Less than significant
7	GW-11: Effects of water transfers on groundwater	--		--
8	WQ-1: Effects on ammonia concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-2: Effects on ammonia concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-3: Effects on boron concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-4: Effects on boron concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-5: Effects on bromide concentrations resulting from facilities operations and maintenance (CM1)	Significant/ Adverse	Mitigation Measure WQ-5: Avoid, minimize, or offset, as feasible, adverse water quality conditions	Significant and unavoidable
8	WQ-6: Effects on bromide concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-7: Effects on chloride concentrations resulting from facilities operations and maintenance (CM1)	Significant/ Adverse	Mitigation Measure WQ-7: Conduct additional evaluation and modeling of increased chloride levels and develop and implement phased mitigation actions Mitigation Measure WQ7a: Conduct additional evaluation and modeling of increased chloride levels following initial operations of CM1. Mitigation Measure WQ7b: Consult with Delta water purveyors to identify means to avoid, minimize, or offset for reduced seasonal availability of water that meets applicable water quality objectives Mitigation Measure WQ7c: Consult with DFW/USFWS, and Suisun Marsh stakeholders, to identify potential actions to avoid or minimize chloride level increases in the marsh.	Significant and unavoidable
8	WQ-8: Effects on chloride concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-9: Effects on dissolved oxygen resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-10: Effects on dissolved oxygen resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-11: Effects on electrical conductivity concentrations resulting from facilities operations and maintenance (CM1)	Significant/ Adverse	Mitigation Measure WQ-11: Avoid, minimize, or offset, as feasible, reduced water quality conditions Mitigation Measure WQ-11a: Conduct additional evaluation and modeling of increased EC levels following initial operations of CM1. Mitigation Measure WQ-11b: Consult with CDFW/USFWS, and Suisun Marsh stakeholders, to identify potential actions to avoid or minimize EC level increases in the marsh.	Significant and unavoidable
8	WQ-12: Effects on electrical conductivity concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-13: Effects on mercury concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant

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8	WQ-14: Effects on mercury concentrations resulting from implementation of CM2-CM22	Significant/ Adverse	No available mitigation at this time	Significant and unavoidable
8	WQ-15: Effects on nitrate concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-16: Effects on nitrate concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-17: Effects on organic carbon concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-18: Effects on organic carbon concentrations resulting from implementation of CM2-CM22	Significant/ Adverse	Mitigation Measure WQ-18: Design wetland and riparian habitat features to minimize effects on municipal intakes	Significant and unavoidable
8	WQ-19: Effects on pathogens resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-20: Effects on pathogens resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-21: Effects on pesticide concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-22: Effects on pesticide concentrations resulting from implementation of CM2-CM22	Significant/ Adverse	Mitigation Measure WQ-22: Implement principals of integrated pest management	Significant and unavoidable
8	WQ-23: Effects on phosphorus concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-24: Effects on phosphorus concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-25: Effects on selenium concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-26: Effects on selenium concentrations resulting from implementation of CM2-CM22	Significant/ Adverse	Mitigation Measure WQ-26: Selenium Management	Less than significant
8	WQ-27: Effects on trace metal concentrations resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-28: Effects on trace metal concentrations resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-29: Effects on TSS and turbidity resulting from facilities operations and maintenance (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-30: Effects on TSS and turbidity resulting from implementation of CM2-CM22	Less than significant/ Not adverse		Less than significant
8	WQ-31: Water quality impacts resulting from construction-related activities (CM1)	Less than significant/ Not adverse		Less than significant
8	WQ-32: Potential water quality effects from water transfers	--		--
9	GEO-1: Loss of property, personal injury, or death from structural failure resulting from strong seismic shaking of water conveyance features during construction	Less than significant/ Not adverse		Less than significant
9	GEO-2: Loss of property, personal injury, or death from settlement or collapse caused by dewatering during construction of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-3: Loss of property, personal injury, or death from ground settlement during construction of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-4: Loss of property, personal injury, or death from slope failure during construction of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-5: Loss of property, personal injury, or death from structural failure resulting from construction-related ground motions during construction of water conveyance features	Less than significant/ Not adverse		Less than significant

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9	GEO-6: Loss of property, personal injury, or death from structural failure resulting from rupture of a known earthquake fault during operation of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-7: Loss of property, personal injury, or death from structural failure resulting from strong seismic shaking during operation of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-8: Loss of property, personal injury, or death from structural failure resulting from seismic-related ground failure (including liquefaction) during operation of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-9: Loss of property, personal injury, or death from landslides and other slope instability during operation of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-10: Loss of property, personal injury, or death from seiche or tsunami during operation of water conveyance features	Less than significant/ Not adverse		Less than significant
9	GEO-11: Ground failure caused by increased groundwater surface elevations from unlined canal seepage as a result of operating the water conveyance facilities	Less than significant/ Not adverse		Less than significant
9	GEO-12: Loss of property, personal injury, or death resulting from structural failure caused by rupture of a known earthquake fault at Restoration Opportunity Areas	Less than significant/ Not adverse		Less than significant
9	GEO-13: Loss of property, personal injury, or death from structural failure resulting from strong seismic shaking at Restoration Opportunity Areas	Less than significant/ Not adverse		Less than significant
9	GEO-14: Loss of property, personal injury, or death from structural failure resulting from seismic-related ground failure (including liquefaction) beneath Restoration Opportunity Areas	Less than significant/ Not adverse		Less than significant
9	GEO-15: Loss of property, personal injury, or death from landslides and other slope instability at Restoration Opportunity Areas	Less than significant/ Not adverse		Less than significant
9	GEO-16: Loss of property, personal injury, or death from seiche or tsunami at Restoration Opportunity Areas as a result of implementing the conservation actions	Less than significant/ Not adverse		Less than significant
10	SOILS-1: Accelerated erosion caused by vegetation removal and other soil disturbances as a result of constructing the proposed water conveyance facilities	Less than significant/ Not adverse		Less than significant
10	SOILS-2: Loss of topsoil from excavation, overcovering, and inundation as a result of constructing the proposed water conveyance facilities	Significant/ Adverse	Mitigation Measure SOILS-2a: Minimize extent of excavation and soil disturbance Mitigation Measure SOILS-2b: Salvage, stockpile, and replace topsoil and prepare a topsoil storage and handling plan	Significant and unavoidable
10	SOILS-3: Property loss, personal injury, or death from instability, failure, and damage from construction on or in soils subject to subsidence as a result of constructing the proposed water conveyance facilities	Less than significant/ Not adverse		Less than significant
10	SOILS-4: Risk to life and property as a result of constructing the proposed water conveyance facilities in areas of expansive, corrosive, and compressible soils	Less than significant/ Not adverse		Less than significant
10	SOILS-5: Accelerated bank erosion from increased channel flow rates as a result of operations	Less than significant/ Not adverse		Less than significant

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10	SOILS-6: Accelerated erosion caused by clearing, grubbing, grading, and other disturbances associated with construction of proposed conservation measures CM2-CM11, CM18 and CM19	Less than significant/ Not adverse		Less than significant
10	SOILS-7: Loss of topsoil from excavation, overcovering, and inundation as a result of implementing the proposed conservation measures CM2-CM11	Significant/ Adverse	Mitigation Measure SOILS-2a: Minimize extent of excavation and soil disturbance Mitigation Measure SOILS-2b: Salvage, stockpile, and replace topsoil and prepare a topsoil storage and handling plan	Significant and unavoidable
10	SOILS-8: Property loss, personal injury, or death from instability, failure, and damage from construction on soils subject to subsidence as a result of implementing the proposed conservation measures CM2-CM11	Less than significant/ Not adverse		Less than significant
10	SOILS-9: Risk to life and property from construction in areas of expansive, corrosive, and compressible soils as a result of implementing the proposed conservation measures CM2-CM11	Less than significant/ Not adverse		Less than significant
11	AQUA-1: Effects of construction of water conveyance facilities on delta smelt	Less than significant/ Not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-2: Effects of maintenance of water conveyance facilities on delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-3: Effects of water operations on entrainment of delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-4: Effects of water operations on spawning habitat for delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-5: Effects of water operations on rearing habitat for delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-6: Effects of water operations on migration conditions for delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-7: Effects of construction of restoration measures on delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-8: Effects of contaminants associated with restoration measures on delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-9: Effects of restored habitat conditions on delta smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-10: Effects of methylmercury management on delta smelt (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-11: Effects of invasive aquatic vegetation management on delta smelt (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-12: Effects of dissolved oxygen level management on delta smelt (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-13: Effects of localized reduction of predatory fish on delta smelt (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-14: Effects of nonphysical fish barriers on delta smelt (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-15: Effects of illegal harvest reduction on delta smelt (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-16: Effects of conservation hatcheries on delta smelt (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-17: Effects of urban stormwater treatment on delta smelt (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-18: Effects of removal/relocation of nonproject diversions on delta smelt (CM21)	Less than significant/ Not adverse		Less than significant

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11	AQUA-19: Effects of construction of water conveyance facilities on longfin smelt	Significant/ Adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-20: Effects of maintenance of water conveyance facilities on longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-21: Effects of water operations on entrainment of longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-22: Effects of water operations on spawning habitat for longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-23: Effects of water operations on rearing habitat for longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-24: Effects of water operations on migration conditions for longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-25: Effects of construction of restoration measures on longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-26: Effects of contaminants associated with restoration measures on longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-27: Effects of restored habitat conditions on longfin smelt	Less than significant/ Not adverse		Less than significant
11	AQUA-28: Effects of methylmercury management on longfin smelt (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-29: Effects of invasive aquatic vegetation management on longfin smelt (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-30: Effects of dissolved oxygen level management on longfin smelt (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-31: Effects of localized reduction of predatory fish on longfin smelt (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-32: Effects of nonphysical fish barriers on longfin smelt (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-33: Effects of illegal harvest reduction on longfin smelt (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-34: Effects of conservation hatcheries on longfin smelt (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-35: Effects of urban stormwater treatment on longfin smelt (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-36: Effects of removal/relocation of nonproject diversions on longfin smelt (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-37: Effects of construction of water conveyance facilities on Chinook salmon (winter-run ESU)	Significant/ Adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-38: Effects of maintenance of water conveyance facilities on Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-39: Effects of water operations on entrainment of juvenile Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant

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11	AQUA-40: Effects of water operations on spawning habitat for Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-41: Effects of water operations on upstream fry and juvenile rearing habitat for Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-42: Effects of water operations on migration conditions for Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-43: Effects of construction of restoration measures on Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-44: Effects of contaminants associated with restoration measures on Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-45: Effects of restored habitat conditions on Chinook salmon (winter-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-46: Effects of methylmercury management on Chinook salmon (winter-run ESU) (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-47: Effects of invasive aquatic vegetation management on Chinook salmon (winter-run ESU) (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-48: Effects of dissolved oxygen level management on Chinook salmon (winter-run ESU) (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-49: Effects of localized reduction of predatory fish on Chinook salmon (winter-run ESU) (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-50: Effects of nonphysical fish barriers on Chinook salmon (winter-run ESU) (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-51: Effects of illegal harvest reduction on Chinook salmon (winter-run ESU) (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-52: Effects of conservation hatcheries on Chinook salmon (winter-run ESU) (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-53: Effects of urban stormwater treatment on Chinook salmon (winter-run ESU) (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-54: Effects of removal/relocation of nonproject diversions on Chinook salmon (winter-run ESU) (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-55: Effects of construction of water conveyance facilities on Chinook salmon (spring-run ESU)	Significant/ not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-56: Effects of maintenance of water conveyance facilities on Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-57: Effects of water operations on entrainment of juvenile Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-58: Effects of water operations on spawning and egg incubation habitat for Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-59: Effects of water operations on upstream larval and juvenile rearing habitat for Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-60: Effects of water operations on migration conditions for Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-61: Effects of construction of restoration measures on Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-62: Effects of contaminants associated with restoration measures on Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-63: Effects of restored habitat conditions on Chinook salmon (spring-run ESU)	Less than significant/ Not adverse		Less than significant

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11	AQUA-64: Effects of methylmercury management on Chinook salmon (spring-run ESU) (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-65: Effects of invasive aquatic vegetation management on Chinook salmon (spring-run ESU) (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-66: Effects of dissolved oxygen level management on Chinook salmon (spring-run ESU) (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-67: Effects of localized reduction of predatory fish on Chinook salmon (spring-run ESU) (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-68: Effects of nonphysical fish barriers on Chinook salmon (spring-run ESU) (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-69: Effects of illegal harvest reduction on Chinook salmon (spring-run ESU) (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-70: Effects of conservation hatcheries on Chinook salmon (spring-run ESU) (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-71: Effects of urban stormwater treatment on Chinook salmon (spring-run ESU) (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-72: Effects of removal/relocation of nonproject diversions on Chinook salmon (spring-run ESU) (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-73: Effects of construction of water conveyance facilities on Chinook salmon (fall- and late fall–run ESU)	Significant; not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-74: Effects of maintenance of water conveyance facilities on Chinook salmon (fall- and late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-75: Effects of water operations on entrainment of juvenile Chinook salmon (fall- and late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-76: Effects of water operations on spawning and egg incubation habitat for Chinook salmon (fall- and late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-77: Effects of water operations on upstream larval and juvenile rearing habitat for Chinook salmon (fall- and late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-78: Effects of water operations on migration conditions for Chinook salmon (fall- and late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-79: Effects of construction of restoration measures on Chinook salmon (fall-/late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-80: Effects of contaminants associated with restoration measures on Chinook salmon (fall-/late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-81: Effects of restored habitat conditions on Chinook salmon (fall-/late fall–run ESU)	Less than significant/ Not adverse		Less than significant
11	AQUA-82: Effects of methylmercury management on Chinook salmon (fall-/late fall–run ESU) (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-83: Effects of invasive aquatic vegetation management on Chinook salmon (fall-/late fall–run ESU) (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-84: Effects of dissolved oxygen level management on Chinook salmon (fall-/late fall–run ESU) (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-85: Effects of localized reduction of predatory fish on Chinook salmon (fall-/late fall–run ESU) (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-86: Effects of nonphysical fish barriers on Chinook salmon (fall-/late fall–run ESU) (CM16)	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
11	AQUA-87: Effects of illegal harvest reduction on Chinook salmon (fall-/late fall–run ESU) (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-88: Effects of conservation hatcheries on Chinook salmon (fall-/late fall–run ESU) (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-89: Effects of urban stormwater treatment on Chinook salmon (fall-/late fall–run ESU) (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-90: Effects of removal/relocation of nonproject diversions on Chinook salmon (fall-/late fall–run ESU) (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-91: Effects of construction of water conveyance facilities on steelhead	Significant/ not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-92: Effects of maintenance of water conveyance facilities on steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-93: Effects of water operations on entrainment of steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-94: Effects of water operations on spawning and egg incubation habitat for steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-95: Effects of water operations on upstream fry and juvenile rearing habitat for steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-96: Effects of water operations on migration conditions for steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-97: Effects of construction of restoration measures on steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-98: Effects of contaminants associated with restoration measures on steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-99: Effects of restored habitat conditions on steelhead	Less than significant/ Not adverse		Less than significant
11	AQUA-100: Effects of methylmercury management on steelhead (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-101: Effects of invasive aquatic vegetation management on steelhead (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-102: Effects of dissolved oxygen level management on steelhead (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-103: Effects of localized reduction of predatory fish on steelhead (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-104: Effects of nonphysical fish barriers on steelhead (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-105: Effects of illegal harvest reduction on steelhead (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-106: Effects of conservation hatcheries on steelhead (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-107: Effects of urban stormwater treatment on steelhead (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-108: Effects of removal/relocation of nonproject diversions on steelhead (CM21)	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
11	AQUA-109: Effects of construction of water conveyance facilities on Sacramento splittail	Significant/ Adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-110: Effects of maintenance of water conveyance facilities on Sacramento splittail	Less than significant/ Not adverse		Less than significant
11	AQUA-111: Effects of water operations on entrainment of Sacramento	Less than significant/ Not adverse		Less than significant
11	AQUA-112: Effects of water operations on spawning habitat for Sacramento splittail	Less than significant/ Not adverse		Less than significant
11	AQUA-113: Effects of water operations on rearing habitat for Sacramento splittail	Less than significant/ Not adverse		Less than significant
11	AQUA-114: Effects of water operations on migration conditions for Sacramento splittail	Less than significant/ Not adverse		Less than significant
11	AQUA-115: Effects of construction of restoration measures on Sacramento splittail	Less than significant/ Not adverse		Less than significant
11	AQUA-116: Effects of contaminants associated with restoration measures on Sacramento splittail	Less than significant/ Not adverse		Less than significant
11	AQUA-117: Effects of restored habitat conditions on Sacramento splittail	Less than significant/ Not adverse		Less than significant
11	AQUA-118: Effects of methylmercury management on Sacramento splittail (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-119: Effects of invasive aquatic vegetation management on Sacramento splittail (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-120: Effects of dissolved oxygen level management on Sacramento splittail (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-121: Effects of localized reduction of predatory fish on Sacramento splittail (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-122: Effects of nonphysical fish barriers on Sacramento splittail (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-123: Effects of illegal harvest reduction on Sacramento splittail (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-124: Effects of conservation hatcheries on Sacramento splittail (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-125: Effects of urban stormwater treatment on Sacramento splittail (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-126: Effects of removal/relocation of nonproject diversions on Sacramento splittail (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-127: Effects of construction of water conveyance facilities on green sturgeon	Significant/ Adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-128: Effects of maintenance of water conveyance facilities on green sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-129: Effects of water operations on entrainment of green sturgeon	Less than significant/ Not adverse		Less than significant

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11	AQUA-130: Effects of water operations on spawning habitat for green sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-131: Effects of water operation on rearing habitat for green sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-132: Effects of water operations on migration conditions for green sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-133: Effects of construction of restoration measures on green sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-134: Effects of contaminants associated with restoration measures on green sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-135: Effects of restored habitat conditions on green sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-136: Effects of methylmercury management on green sturgeon (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-137: Effects of invasive aquatic vegetation management on green sturgeon (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-138: Effects of dissolved oxygen level management on green sturgeon (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-139: Effects of localized reduction of predatory fish on green sturgeon (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-140: Effects of nonphysical fish barriers on green sturgeon (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-141 Effects of illegal harvest reduction on green sturgeon (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-142: Effects of conservation hatcheries on green sturgeon (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-143: Effects of urban stormwater treatment on green sturgeon (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-144: Effects of removal/relocationof nonproject diversions on green sturgeon (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-145: Effects of construction of water conveyance facilities on white sturgeon	Significant/ Not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-146: Effects of maintenance of water conveyance facilities on white sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-147: Effects of water operations on entrainment of white sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-148: Effects of water operations on spawning habitat for white sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-149: Effects of water operations on rearing habitat for white sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-150: Effects of water operations on migration conditions for white sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-151: Effects of construction of restoration measures on white sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-152: Effects of contaminants associated with restoration measures on white sturgeon	Less than significant/ Not adverse		Less than significant
11	AQUA-153: Effects of restored habitat conditions on white sturgeon	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
11	AQUA-154: Effects of methylmercury management on white sturgeon (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-155: Effects of invasive aquatic vegetation management on white sturgeon (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-156: Effects of dissolved oxygen level management on white sturgeon (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-157: Effects of localized reduction of predatory fish on white sturgeon (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-158: Effects of nonphysical fish barriers on white sturgeon (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-159: Effects of illegal harvest reduction on white sturgeon (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-160: Effects of conservation hatcheries on white sturgeon (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-161: Effects of urban stormwater treatment on white sturgeon (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-162: Effects of removal/relocationof nonproject diversions on white sturgeon (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-163: Effects of construction of water conveyance facilities on Pacific lamprey	Significant/ Not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-164: Effects of maintenance of water conveyance facilities on Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-165: Effects of water operations on entrainment of Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-166: Effects of water operations on spawning habitat for Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-167: Effects of water operations on rearing habitat for Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-168: Effects of water operations on migration conditions for Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-169: Effects of construction of restoration measures on Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-170: Effects of contaminants associated with restoration measures on Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-171: Effects of restored habitat conditions on Pacific lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-172: Effects of methylmercury management on Pacific lamprey (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-173: Effects of invasive aquatic vegetation management on Pacific lamprey (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-174: Effects of dissolved oxygen level management on Pacific lamprey (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-175: Effects of localized reduction of predatory fish on Pacific lamprey (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-176: Effects of nonphysical fish barriers on Pacific lamprey (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-177: Effects of illegal harvest reduction on Pacific lamprey (CM17)	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
11	AQUA-178: Effects of conservation hatcheries on Pacific lamprey (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-179: Effects of urban stormwater treatment on Pacific lamprey (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-180: Effects of removal/relocationof nonproject diversions on Pacific lamprey (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-181: Effects of construction of water conveyance facilities on river lamprey	Significant/ Not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-182: Effects of maintenance of water conveyance facilities on river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-183: Effects of water operations on entrainment of river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-184: Effects of water operations on spawning habitat for river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-185: Effects of water operations on rearing habitat for river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-186: Effects of water operations-related decline on migration conditions for river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-187: Effects of construction of restoration measures on river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-188: Effects of contaminants associated with restoration measures on river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-189: Effects of restored habitat conditions on river lamprey	Less than significant/ Not adverse		Less than significant
11	AQUA-190: Effects of methylmercury management on river lamprey (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-191: Effects of invasive aquatic vegetation management on river lamprey (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-192: Effects of dissolved oxygen level management on river lamprey (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-193: Effects of localized reduction of predatory fish on river lamprey (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-194: Effects of nonphysical fish barriers on river lamprey (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-195: Effects of illegal harvest reduction on river lamprey (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-196: Effects of conservation hatcheries on river lamprey (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-197: Effects of urban stormwater treatment on river lamprey (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-198: Effects of removal/relocationof nonproject diversions on river lamprey (CM21)	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
11	AQUA-199: Effects of construction of water conveyance facilities on non-covered aquatic species of primary management concern	Significant/ Not adverse	Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise. Geotechnical studies will be conducted to determine the feasibility of vibratory installation of sheet pile, intake pipe foundation piles, and dock piles for barge landings. Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise	Less than significant
11	AQUA-200: Effects of maintenance of water conveyance facilities on non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-201: Effects of water operations on entrainment of non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-202: Effects of water operations on spawning habitat for non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-203: Effects of water operations on rearing habitat for non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-204: Effects of water operations-related decline on migration conditions for non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-205: Effects of construction of restoration measures on non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-206: Effects of contaminants associated with restoration measures on non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-207: Effects of restored habitat conditions on non-covered aquatic species of primary management concern	Less than significant/ Not adverse		Less than significant
11	AQUA-208: Effects of methylmercury management on non-covered aquatic species of primary management concern (CM12)	Less than significant/ Not adverse		Less than significant
11	AQUA-209: Effects of invasive aquatic vegetation management on non-covered aquatic species of primary management concern (CM13)	Less than significant/ Not adverse		Less than significant
11	AQUA-210: Effects of dissolved oxygen level management on non-covered aquatic species of primary management concern (CM14)	Less than significant/ Not adverse		Less than significant
11	AQUA-211: Effects of localized reduction of predatory fish on non-covered aquatic species of primary management concern (CM15)	Less than significant/ Not adverse		Less than significant
11	AQUA-212: Effects of nonphysical fish barriers on non-covered aquatic species of primary management concern (CM16)	Less than significant/ Not adverse		Less than significant
11	AQUA-213: Effects of illegal harvest reduction on non-covered aquatic species of primary management concern (CM17)	Less than significant/ Not adverse		Less than significant
11	AQUA-214: Effects of conservation hatcheries on non-covered aquatic species of primary management concern (CM18)	Less than significant/ Not adverse		Less than significant
11	AQUA-215: Effects of urban stormwater treatment on non-covered aquatic species of primary management concern (CM19)	Less than significant/ Not adverse		Less than significant
11	AQUA-216: Effects of removal/relocation of nonproject diversions on non-covered aquatic species of primary management concern (CM21)	Less than significant/ Not adverse		Less than significant
11	AQUA-217: Effects of water operations on reservoir coldwater fish habitat	Less than significant/ Not adverse		Less than significant
11	AQUA-218: Potential Effects of Water Transfers on Fish and Aquatic Resources	--		--
12	BIO-1: Changes in tidal perennial aquatic natural community as a result of implementing BDCP conservation measures	(Less than significant/ Not adverse); Beneficial		(Less than significant); Beneficial

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
12	BIO-2: Increased frequency and duration of periodic inundation of tidal perennial aquatic natural community	Beneficial		Beneficial
12	BIO-3: Modification of tidal perennial aquatic natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-4: Changes in tidal brackish emergent wetland natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-5: Modification of tidal brackish emergent wetland natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-6: Changes in tidal freshwater emergent wetland natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-7: Increased frequency and duration of periodic inundation of tidal freshwater emergent wetland natural community	Less than significant/ Not adverse		Less than significant
12	BIO-8: Modification of tidal freshwater emergent wetland natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-9: Changes in valley/foothill riparian natural community as a result of implementing BDCP conservation measures	Significant/ Adverse	Mitigation Measure BIO-9: Avoid construction through the Cosumnes River riparian corridor with east-west transmission line	Less than significant
12	BIO-10: Increased frequency and duration of periodic inundation of valley/foothill riparian natural community	Less than significant/ Not adverse		Less than significant
12	BIO-11: Modification of valley/foothill riparian natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-12: Changes in nontidal perennial aquatic natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-13: Increased frequency and duration of periodic inundation of nontidal perennial aquatic natural community	Less than significant/ Not adverse		Less than significant
12	BIO-14: Modification of nontidal perennial aquatic natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-15: Changes in nontidal freshwater perennial emergent wetland natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-16: Increased frequency and duration of periodic inundation of nontidal freshwater perennial emergent wetland natural community	Less than significant/ Not adverse		Less than significant
12	BIO-17: Modification of nontidal freshwater perennial emergent wetland natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-18: Changes in alkali seasonal wetland complex natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-19: Increased frequency and duration of periodic inundation of alkali seasonal wetland complex natural community	Less than significant/ Not adverse		Less than significant
12	BIO-20: Modification of alkali seasonal wetland complex natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-21: Changes in vernal pool complex natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-22: Increased frequency and duration of periodic inundation of vernal pool complex natural community	Less than significant/ Not adverse		Less than significant
12	BIO-23: Modification of vernal pool complex natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
12	BIO-24: Changes in the acreage of managed wetland natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-25: Increased frequency and duration of periodic inundation of managed wetland natural community	Less than significant/ Not adverse		Less than significant
12	BIO-26: Modification of managed wetland natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-27: Increased frequency and duration of periodic flooding of other natural seasonal wetland natural community	Less than significant/ Not adverse		Less than significant
12	BIO-28: Modification of other natural seasonal wetland natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-29: Changes in grassland natural community as a result of implementing BDCP conservation measures	Less than significant/ Not adverse		Less than significant
12	BIO-30: Increased frequency and duration of periodic inundation of grassland natural community	Less than significant/ Not adverse		Less than significant
12	BIO-31: Modification of grassland natural community from ongoing operation, maintenance and management activities	Less than significant/ Not adverse		Less than significant
12	BIO-32: Loss or conversion of habitat for and direct mortality of vernal pool crustaceans	Less than significant/ Not adverse		Less than significant
12	BIO-33: Indirect effects of plan implementation on vernal pool crustaceans	Less than significant/ Not adverse		Less than significant
12	BIO-34: Periodic effects of inundation of vernal pool crustacean habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-35: Loss of valley elderberry longhorn beetle habitat	Less than significant/ Not adverse		Less than significant
12	BIO-36: Indirect effects on valley elderberry longhorn beetle and its habitat	Less than significant/ Not adverse		Less than significant
12	BIO-37: Periodic effects of inundation of valley elderberry longhorn beetle habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-38: Loss or conversion of habitat for and direct mortality of nonlisted vernal pool invertebrates	Less than significant/ Not adverse		Less than significant
12	BIO-39: Indirect effects of plan implementation on nonlisted vernal pool invertebrates	Less than significant/ Not adverse		Less than significant
12	BIO-40: Periodic effects of inundation of nonlisted vernal pool invertebrates' habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-41: Loss or conversion of habitat for and direct mortality of Sacramento and Antioch Dunes anthicid beetles	Less than significant/ Not adverse		Less than significant
12	BIO-42: Loss or conversion of habitat for and direct mortality of delta green ground beetle	Significant/ Adverse	Mitigation Measure BIO-42: Avoid impacts on delta green ground beetle and its habitat	Less than significant
12	BIO-43: Loss or conversion of habitat for and direct mortality of Callippe silverspot butterfly	Significant/ Adverse	Mitigation Measure BIO-43: Avoid and minimize loss of Callippe silverspot butterfly habitat	Less than significant
12	BIO-44: Loss or conversion of habitat for and direct mortality of California red-legged frog	Less than significant/ Not adverse		Less than significant
12	BIO-45: Indirect effects of plan implementation on California red-legged frog	Less than significant/ Not adverse		Less than significant
12	BIO-46: Loss or conversion of habitat for and direct mortality of California tiger salamander	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
12	BIO-47: Indirect effects of plan implementation on California tiger salamander	Less than significant/ Not adverse		Less than significant
12	BIO-48: Periodic effects of inundation of California tiger salamander habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-49: Loss or conversion of habitat for and direct mortality of giant garter snake	Less than significant/ Not adverse		Less than significant
12	BIO-50: Indirect effects of plan implementation on giant garter snake	Less than significant/ Not adverse		Less than significant
12	BIO-51: Periodic effects of inundation of giant garter snake habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-52: Loss or conversion of habitat for and direct mortality of western pond turtle	Less than significant/ Not adverse		Less than significant
12	BIO-53: Indirect effects of plan implementation on western pond turtle	Less than significant/ Not adverse		Less than significant
12	BIO-54: Periodic effects of inundation of western pond turtle habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-55: Loss or conversion of habitat for and direct mortality of special-status reptiles	(Significant/ Adverse); Significant/ Adverse	Mitigation Measure BIO-55: Conduct preconstruction surveys for noncovered special-status reptiles and implement applicable CM22 measures	(Less than significant) ; Less than significant
12	BIO-56: Indirect effects of plan implementation on special-status reptile species	Significant/ Adverse	Mitigation Measure BIO-55: Conduct preconstruction surveys for noncovered special-status reptiles and implement applicable CM22 measures	Less than significant
12	BIO-57: Loss or conversion of habitat for and direct mortality of California black rail	Less than significant/ Not adverse		Less than significant
12	BIO-58: Effects on California black rail associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-59: Indirect effects of plan implementation on California black rail	Less than significant/ Not adverse		Less than significant
12	BIO-60: Fragmentation of California black rail habitat as a result of conservation component implementation	Less than significant/ Not adverse		Less than significant
12	BIO-61: Periodic effects of inundation of California black rail habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-62: Loss or conversion of habitat for and direct mortality of California clapper rail	Less than significant/ Not adverse		Less than significant
12	BIO-63: Indirect effects of plan implementation on California clapper rail	Less than significant/ Not adverse		Less than significant
12	BIO-64: Effects on California clapper rail associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-65: Fragmentation of California clapper rail habitat as a result of construction of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-66: Loss or conversion of habitat for and direct mortality of California least tern	Less than significant/ Not adverse		Less than significant
12	BIO-67: Indirect effects of plan implementation on California least tern	Less than significant/ Not adverse		Less than significant
12	BIO-68: Effects on California least tern associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-69: Loss or conversion of habitat for and direct mortality of greater sandhill crane	(Significant/ Adverse); Significant/ Adverse	Mitigation Measure BIO-69a: Restore greater sandhill crane roost habitat prior to or within the first two years of project construction	(Less than significant) ; Less than significant
12	BIO-70: Effects on greater sandhill crane associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-71: Indirect effects of plan implementation on greater sandhill crane	Less than significant/ Not adverse		Less than significant
12	BIO-72: Loss or conversion of habitat for and direct mortality of lesser sandhill crane	(Significant/ Adverse), Significant/ Adverse	Mitigation Measure BIO-69a: Restore greater sandhill crane roost habitat prior to or within the first two years of project construction	(Less than significant) ; Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
12	BIO-73: Effects on lesser sandhill crane associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-74: Indirect effects of plan implementation on lesser sandhill crane	Less than significant/ Not adverse		Less than significant
12	BIO-75: Loss or conversion of habitat for and direct mortality of least Bell’s vireo and yellow warbler	(Significant/ Adverse); Significant; not adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	(Less than significant) ; Less than significant
12	BIO-76: Fragmentation of least Bell’s vireo and yellow warbler habitat	Less than significant/ Not adverse		
12	BIO-77: Effects on least Bell’s vireo and yellow warbler associated with electrical transmission facilities	Significant/ Adverse	Mitigation Measure BIO-9: Avoid bisecting riparian corridor with east-west transmission line	Less than significant
12	BIO-78: Indirect effects of plan implementation on least Bell’s vireo and yellow warbler	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-79: Periodic effects of inundation of least Bell’s vireo and yellow warbler habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-80: Loss or conversion of habitat for and direct mortality of Suisun song sparrow and saltmarsh common yellowthroat	(Significant/ Not adverse); Significant/ Not adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	(Less than significant) ; Less than significant
12	BIO-81: Indirect effects of plan implementation on Suisun song sparrow and saltmarsh common yellowthroat	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-82: Effects on Suisun song sparrow and saltmarsh common yellowthroat associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-83: Loss or conversion of habitat for and direct mortality of Swainson’s hawk	Less than significant/ Not adverse		Less than significant
12	BIO-84: Effects on Swainson’s hawk associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-85: Effects of noise and visual disturbance on Swainson’s hawk	Less than significant/ Not adverse		Less than significant
12	BIO-86: Periodic effects of inundation of Swainson’s hawk nesting and foraging habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-87: Loss or conversion of habitat for and direct mortality of tricolored blackbird	Less than significant/ Not adverse		Less than significant
12	BIO-88: Effects on tricolored blackbird associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-89: Indirect effects of plan implementation on tricolored blackbird	Less than significant/ Not adverse		Less than significant
12	BIO-90: Periodic effects of inundation of tricolored blackbird habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-91: Loss or conversion of habitat for and direct mortality of western burrowing owl	(Significant/ Adverse); Significant; not adverse	Mitigation Measure BIO-91: Compensate for loss of high-value burrowing owl habitat	(Less than significant) ; Less than significant
12	BIO-92: Effects on western burrowing owl associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-93: Indirect effects of plan implementation on western burrowing owl	Less than significant/ Not adverse		Less than significant
12	BIO-94: Periodic effects of inundation on western burrowing owl habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-95: Loss or conversion of habitat for and direct mortality of western yellow-billed cuckoo	Less than significant/ Not adverse		Less than significant
12	BIO-96: Fragmentation of western yellow-billed cuckoo habitat as a result of constructing the water conveyance facilities	Less than significant/ Not adverse		Less than significant
12	BIO-97: Effects on western yellow-billed cuckoo associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant

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12	BIO-98: Indirect effects of plan implementation on western yellow-billed cuckoo	Less than significant/ Not adverse		Less than significant
12	BIO-99: Periodic effects of inundation of western yellow-billed cuckoo habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-100: Loss or conversion of habitat for and direct mortality of white-tailed kite	Less than significant/ Not adverse		Less than significant
12	BIO-101: Effects on white-tailed kite associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-102: Indirect effects of plan implementation on white-tailed kite	Less than significant/ Not adverse		Less than significant
12	BIO-103: Periodic effects of inundation of white-tailed kite habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-104: Loss or conversion of habitat for and direct mortality of yellow-breasted chat	Less than significant/ Not adverse		Less than significant
12	BIO-105: Fragmentation of yellow-breasted chat habitat as a result of constructing the water conveyance facilities	Less than significant/ Not adverse		Less than significant
12	BIO-106: Effects on yellow-breasted chat associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-107: Indirect effects of plan implementation on yellow-breasted chat	Less than significant/ Not adverse		Less than significant
12	BIO-108: Periodic effects of inundation of yellow-breasted chat habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-109: Loss or conversion of habitat for and direct mortality of Cooper’s hawk and osprey	Significant / Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-110: Effects on Cooper’s hawk and osprey associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-111: Indirect effects of plan implementation on Cooper’s hawk and osprey	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-112: Periodic effects of inundation of Cooper’s hawk and osprey nesting habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-113: Loss or conversion of habitat for and direct mortality of golden eagle and ferruginous hawk	Less than significant/ Not adverse		Less than significant
12	BIO-114: Effects on golden eagle and ferruginous hawk associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-115: Indirect effects of plan implementation on golden eagle and ferruginous hawk	Less than significant/ Not adverse		Less than significant
12	BIO-116: Periodic effects of inundation on golden eagle and ferruginous hawk habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-117: Loss or conversion of nesting habitat for and direct mortality of cormorants, herons and egrets	Significant / Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-118: Effects associated with electrical transmission facilities on cormorants, herons and egrets	Less than significant/ Not adverse		Less than significant
12	BIO-119: Indirect effects of plan implementation on cormorants, herons and egrets	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-120: Periodic effects of inundation on cormorants, herons and egrets as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
12	BIO-121: Loss or conversion of habitat for short-eared owl and northern harrier	(Significant/ Adverse); Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds Mitigation Measure BIO-121: Near-term conservation of cultivated lands must include sufficient acres of crop types that benefit nesting short-eared owl and northern harrier	Less than significant
12	BIO-122: Effects on short-eared owl and northern harrier associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-123: Indirect effects of plan implementation on short-eared owl and northern harrier	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-124: Periodic effects of inundation on short-eared owl and northern harrier as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-125: Loss or conversion of habitat for and direct mortality of mountain plover	Less than significant/ Not adverse		Less than significant
12	BIO-126: Effects on mountain plover associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-127: Indirect effects of operations and maintenance of water conveyance facilities on mountain plover	Less than significant/ Not adverse		Less than significant
12	BIO-128: Periodic effects of inundation on mountain plover as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-129: Periodic effects of inundation on black tern nesting habitat as a result of construction of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-130: Loss or conversion of habitat for and direct mortality of grasshopper sparrow and California horned lark	(Significant/ Adverse); Significant/ Adverse	Mitigation Measure BIO-130: Compensate for loss of nesting habitat for grasshopper sparrow Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	(Less than significant) ; Less than significant
12	BIO-131: Effects on grasshopper sparrow and California horned lark associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-132: Indirect effects of plan implementation on grasshopper sparrow and California horned lark	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-133: Periodic effects of inundation on grasshopper sparrow and California horned lark as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-134: Loss or conversion of habitat for and direct mortality of least bittern and white-faced ibis	(Less than significant/ Not adverse); Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	(Less than significant) ; Less than significant
12	BIO-135: Effects on least bittern and white-faced ibis associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-136: Indirect effects of plan implementation on least bittern and white-faced ibis	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-137: Periodic effects of inundation on least bittern and white-faced ibis as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-138: Loss or conversion of modeled habitat for and direct mortality of loggerhead shrike	(Significant/ Adverse) ; Significant/ Adverse	Mitigation Measure BIO-138: Compensate for loss of high-value loggerhead shrike habitat Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	(Less than significant) ; Less than significant
12	BIO-139: Effects on loggerhead shrike associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-140: Indirect effects of plan implementation on loggerhead shrike	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
12	BIO-141: Periodic effects of inundation on loggerhead shrike as a result of implementation of conservation components	Significant/ Adverse		Less than significant
12	BIO-142: Loss or conversion of habitat for and direct mortality of Modesto song sparrow	(Significant/ Adverse) ; Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	(Less than significant) ; Less than significant
12	BIO-143: Effects on Modesto song sparrow associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-144: Indirect effects of plan implementation on Modesto song sparrow	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-145: Periodic effects of inundation on Modesto song sparrow as a result of construction of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-146: Indirect effects of the construction of conservation components on bank swallow	Significant/ Adverse	Mitigation Measure BIO-146 Active bank swallow colonies shall be avoided and indirect effects on bank swallow will be minimized	Less than significant
12	BIO-147: Upstream effects of reservoir and water conveyance facility operations on bank swallow	(Significant/ Adverse); Significant/ Adverse	Mitigation Measure BIO-147: Monitor bank swallow colonies and evaluate winter and spring flows upstream of the Plan Area	(Less than significant) ; Less than significant
12	BIO-148: Loss of habitat for and direct mortality of yellow-headed blackbird	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-149: Effects on yellow-headed blackbird associated with electrical transmission facilities	Less than significant/ Not adverse		Less than significant
12	BIO-150: Indirect effects of plan implementation on yellow-headed blackbird	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-151: Periodic effects of inundation of yellow-headed blackbird nesting habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-152: Loss or conversion of habitat for and direct mortality of riparian brush rabbit	(Less than significant/ Not adverse) ; Less than significant/ Not adverse		Less than significant
12	BIO-153: Indirect effects of plan implementation on riparian brush rabbit	Less than significant/ Not adverse		Less than significant
12	BIO-154: Periodic effects of inundation of riparian brush rabbit habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-155: Loss or conversion of habitat for and direct mortality of riparian woodrat	(Less than significant/ Not adverse) ; Less than significant/ Not adverse		Less than significant
12	BIO-156: Indirect effects of plan implementation on riparian woodrat	Less than significant/ Not adverse		Less than significant
12	BIO-157: Periodic effects of inundation of riparian woodrat habitat as a result of implementation of conservation components	Less than significant/ Not adverse		Less than significant
12	BIO-158: Loss or conversion of habitat for and direct mortality of salt marsh harvest mouse	(Less than significant/ Not adverse) ; Less than significant/ Not adverse		Less than significant
12	BIO-159: Indirect effects of plan implementation on salt marsh harvest mouse	Less than significant/ Not adverse		Less than significant
12	BIO-160: Loss or conversion of habitat for and direct mortality of Suisun shrew	(Less than significant/ Not adverse) ; Less than significant/ Not adverse		Less than significant
12	BIO-161: Indirect effects of plan implementation on Suisun shrew	Less than significant/ Not adverse		Less than significant
12	BIO-162: Loss or conversion of habitat for and direct mortality of San Joaquin kit fox and American badger	(Significant/ Adverse); Significant/ Adverse	Mitigation Measure BIO-162: Conduct preconstruction survey for American badger	(Less than significant) ; Less than significant
12	BIO-163: Indirect effects of plan implementation on San Joaquin kit fox and American badger	Significant/ Adverse	Mitigation Measure BIO-162: Conduct preconstruction survey for American badger	Less than significant
12	BIO-164: Loss or conversion of habitat for and direct mortality of San Joaquin pocket mouse	(Less than significant/ Not adverse) ; Less than significant/ Not adverse		(Less than significant) ; Less than significant
12	BIO-165: Indirect effects of plan implementation on San Joaquin pocket mouse	Less than significant/ Not adverse		Less than significant
12	BIO-166: Loss or conversion of habitat for and direct mortality of special-status bats	(Significant/ Adverse); Significant/ Adverse	Mitigation Measure BIO-166: Conduct preconstruction surveys for roosting bats and implement protective measures	(Less than significant) ; Less than significant
12	BIO-167: Indirect effects of plan implementation on special-status bats	Significant/ Adverse	Mitigation Measure BIO-166: Conduct preconstruction surveys for roosting bats and implement protective measures	Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
12	BIO-168: Periodic effects of inundation of special-status bat habitat as a result of implementation of conservation components	Significant/ Adverse	Mitigation Measure BIO-166: Conduct preconstruction surveys for roosting bats and implement protective measures	Less than significant
12	BIO-169: Adverse effects on habitat and populations of vernal pool plants	Significant/ Adverse	Mitigation Measure BIO-169: Apply CM22 Avoidance and Minimization Measures to noncovered special-status plant species	Less than significant
12	BIO-170: Adverse effects on habitat and populations of alkali seasonal wetland plants	Significant/ Adverse	Mitigation Measure BIO-169: Apply CM22 Avoidance and Minimization Measures to noncovered special-status plant species	Less than significant
12	BIO-171: Adverse effects on habitat and populations of grassland plant species	Less than significant/ Not adverse		Less than significant
12	BIO-172: Adverse effects on habitat and populations of valley/foothill riparian plants	Less than significant/ Not adverse		Less than significant
12	BIO-173: Adverse effects on habitat and populations of tidal wetland plants	Significant/ Adverse	Mitigation Measure BIO-169: Apply CM22 Avoidance and Minimization Measures to noncovered special-status plant species	Less than significant
12	BIO-174: Adverse effects on habitat and populations of inland dune plants	Less than significant/ Not adverse		Less than significant
12	BIO-175: Adverse effects on habitat and populations of nontidal wetland plants	Significant/ Adverse	Mitigation Measure BIO-169: Apply CM22 Avoidance and Minimization Measures to noncovered special-status plant species	Less than significant
12	BIO-176: Effects of Constructing Water Conveyance Facilities (CM1) on Wetlands and Other Waters of the United States	Less than significant/ Not adverse		Less than significant
12	BIO-177: Effects of Implementing Other Conservation Measures (CM2–CM10) on Wetlands and Other Waters of the United States	Less than significant/ Not adverse		Less than significant
12	BIO-178: Loss or conversion of habitat for waterfowl and shorebirds as a result of water conveyance facilities construction	Significant/ Adverse	Mitigation Measure BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds	Less than significant
12	BIO-179: Loss or conversion of habitat for wintering waterfowl as a result of implementation of conservation components	Significant/ Adverse	Mitigation Measure BIO-179b: Conduct food studies and monitoring to demonstrate food quality of palustrine tidal wetlands in the Yolo and Delta Basins Mitigation Measure BIO-179a: Conduct food studies and monitoring for wintering waterfowl in Suisun Marsh	Less than significant
12	BIO-180: Loss or conversion of habitat for breeding waterfowl	Significant/ Adverse	Mitigation Measure BIO-180: Conduct food and monitoring studies of breeding waterfowl in Suisun Marsh	Less than significant
12	BIO-181: Loss or conversion of habitat for shorebirds	Significant/ Adverse	Mitigation Measure BIO-181: Conduct studies to quantify shorebird food resources and habitat value in tidal wetlands	Less than significant
12	BIO-182: Effects on habitat and populations of common wildlife and plants	Less than significant/ Not adverse		Less than significant
12	BIO-183: Effect of BDCP conservation measures on wildlife corridors	Less than significant/ Not adverse		Less than significant
12	BIO-184: Adverse effects on natural communities resulting from the introduction and spread of invasive plant species	Less than significant/ Not adverse		Less than significant
12	BIO-185: Effects of water transfers on terrestrial biological resources	--		--
12	BIO-186: Compatibility of the proposed water conveyance facilities and other conservation measures with federal, state, or local laws, plans, policies, or executive orders addressing terrestrial biological resources in the study area	--		--
13	LU-1: Incompatibility with applicable land use plans and policies as a result of constructing the proposed water conveyance facility (CM1)	--		--
13	LU-2: Conflicts with existing land uses as a result of constructing the proposed water conveyance facility (CM1)	No impact/ Adverse		No impact

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
13	LU-3: Create physical structures adjacent to and through a portion of an existing community as a result of constructing the proposed water conveyance facility (CM1)	Significant/ Adverse	TRANS-1a: Implement site-specific construction traffic management plan TRANS-1b: Limit hours or amount of construction activity on congested roadway segments	Significant and unavoidable
13	LU-4: Incompatibility with applicable land use designations, goals and policies as a result of implementing the proposed Conservation Measures 2-21	--		--
13	LU-5: Conflicts with existing land uses as a result of implementing the proposed Conservation Measures 2-21	--		--
13	LU-6: Create physical structures adjacent to and through a portion of an existing community as a result of implementing the proposed Conservation Measures 2-21	Less than significant/ Not adverse		Less than significant
14	AG-1: Temporary conversion, short-term conversion, and permanent conversion of Important Farmland or of farmland under Williamson Act contracts or in a Farmland Security Zone as a result of constructing the proposed water conveyance facility.	Significant/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible MM AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach	Significant and unavoidable
14	AG-2: Other effects on agriculture as a result of constructing and operating the proposed water conveyance facility	Significant/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones Mitigation Measure GW-1: Maintain water supplies in areas affected by construction dewatering Mitigation Measure GW-6: Agricultural lands seepage minimization MM WQ-11: Avoid, minimize, or offset, as feasible, reduced water quality conditions	Significant and unavoidable
14	AG-3: Temporary conversion, short-term conversion, and permanent conversion of Important Farmland or of land subject to Williamson Act contracts or in Farmland Security Zone as a result of implementing the proposed Conservation Measures 2-11, 13, 15, 16, 20, and 21	Significant/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones	Significant and unavoidable
14	AG-4: Other effects on agriculture as a result of implementing the proposed Conservation Measures 2-11, 13, 15, 16, 20, and 21	Significant/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones Mitigation Measure GW-6: Agricultural lands seepage minimization	Significant and unavoidable
15	REC-1: Permanent displacement of existing well-established public use or private commercial recreation facility available for public access as a result of the location of the proposed water conveyance facilities	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
15	REC-2: Result in long-term reduction of recreation opportunities and experiences as a result of constructing the proposed water conveyance facilities	Significant/ Adverse	Mitigation Measure REC-2: Provide alternative bank fishing access sites Mitigation Measure BIO-72: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines Mitigation Measure AES-1b: Install visual barriers between construction work areas and sensitive receptors Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area reclamation plan Mitigation Measure AES-1d: Restore barge unloading facility sites once decommissioned Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities Mitigation Measure AES-1g: Implement best management practices to implement project landscaping plan Mitigation Measure AES-4a: Limit construction to daylight hours within 0.25 mile of residents Mitigation Measure AES-4b: Minimize fugitive light from portable sources used for construction Mitigation Measure AES-4c: Install visual barriers along access routes, where necessary, to prevent light spill from truck headlights toward residences Mitigation Measure TRANS-1a: Implement site-specific traffic management plan Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments Mitigation Measure TRANS-1c: Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments Mitigation Measure NOI-1a: Employ noise-reducing construction practices during construction Mitigation Measure NOI-1b: Prior to construction, initiate a complaint/response tracking program	Significant and unavoidable
15	REC-3: Result in long-term reduction of recreational navigation opportunities as a result of constructing the proposed water conveyance facilities	Significant/ Adverse	Mitigation Measure TRANS-1a: Implement site-specific traffic management plan	?

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
15	REC-4: Result in long-term reduction of recreational fishing opportunities as a result of constructing the proposed water conveyance facilities	Less than significant / Not adverse	Mitigation Measure REC-2: Provide alternative bank fishing access sites Mitigation Measure AQUA-1a: Minimize the use of impact pile driving to address effects of pile driving and other construction-related underwater noise Mitigation Measure AQUA-1b: Use an attenuation device to reduce effects of pile driving and other construction-related underwater noise Mitigation Measure NOI-1a: Employ noise-reducing construction practices during construction Mitigation Measure NOI-1b: Prior to construction, initiate a complaint/response tracking program Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines Mitigation Measure AES-1b: Install visual barriers between construction work areas and sensitive receptors Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area reclamation plan Mitigation Measure AES-1d: Restore barge unloading facility sites once decommissioned Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities Mitigation Measure AES-1g: Implement best management practices to implement project landscaping plan	Less than significant
15	REC-5: Result in long-term reduction of recreational fishing opportunities as a result of the operation of the proposed water conveyance facilities	Less than significant / Not adverse		Less than significant
15	REC-6: Cause a change in reservoir or lake elevations resulting in substantial reductions in water-based recreation opportunities and experiences at north- and south-of-Delta reservoirs	Significant(H2 and H4)/ Adverse (H1, H2 and H4)	Mitigation Measure REC-6: Provide a temporary alternative boat launch to ensure access to San Luis Reservoir	Less than significant
15	REC-7: Result in long-term reduction in water-based recreation opportunities as a result of maintenance of the proposed water conveyance facilities	Less than significant/ Not adverse		Less than significant
15	REC-8: Result in long-term reduction in land-based recreation opportunities as a result of maintenance of the proposed water conveyance facilities	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
15	REC-9: Result in long-term reduction in fishing opportunities as a result of implementingthe proposed conservation components	Less than significant/ Not adverse; (Beneficial in long term)	Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines Mitigation Measure AES-1b: Install visual barriers between construction work areas and sensitive receptors Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area reclamation plan Mitigation Measure AES-1d: Restore barge unloading facility sites once decommissioned Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities Mitigation Measure AES-1g: Implement best management practices to implement project landscaping plan Mitigation Measure AES-4b: Minimize fugitive light from portable sources used for construction Mitigation Measure AES-4c: Install visual barriers along access routes, where necessary, to prevent light spill from truck headlights toward residences Mitigation Measure TRANS-1a: Implement site-specific traffic management plan Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments Mitigation Measure TRANS-1c: Prohibit construction traffic on congested roadway segments Mitigation Measure NOI-1a: Employ noise-reducing construction practices during construction Mitigation Measure NOI-1b: Prior to construction, initiate a complaint/response tracking program	Less than significant; (Beneficial in long term)

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
15	REC-10: Result in long-term reduction in boating-related recreation opportunities as a result of implementing the proposed conservation components	Less than significant (CM2-17, CM19-22)/Not adverse; Significant (CM18)	Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines Mitigation Measure AES-1b: Install visual barriers between construction work areas and sensitive receptors Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area reclamation plan Mitigation Measure AES-1d: Restore barge unloading facility sites once decommissioned Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities Mitigation Measure AES-1g: Implement best management practices to implement project landscaping plan Mitigation Measure AES-4b: Minimize fugitive light from portable sources used for construction Mitigation Measure AES-4c: Install visual barriers along access routes, where necessary, to prevent light spill from truck headlights toward residences Mitigation Measure TRANS-1a: Implement site-specific traffic management plan Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments Mitigation Measure TRANS-1c: Prohibit construction traffic on congested roadway segments Mitigation Measure NOI-1a: Employ noise-reducing construction practices during construction Mitigation Measure NOI-1b: Prior to construction, initiate a complaint/response tracking program	Less than significant
15	REC-11: Result in long-term reduction in upland recreational opportunities as a result of implementing the proposed conservation components	Less than significant/ Adverse		Less than significant
15	REC-12: Compatibility of the proposed water conveyance facilities and other conservation measures with federal, state, or local plans, policies, or regulations addressing recreation resources	--		--
15	REC-13: Effects of water transfers on recreation opportunities	--		--
16	ECON-1: Temporary effects on regional economics in the Delta region during construction of the proposed water conveyance facilities.	--/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible MM AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach	--
16	ECON-2: Effects on population and housing in the Delta region during construction of the proposed water conveyance facilities.	Less than significant/ Not adverse		Less than significant
16	ECON-3: Changes in community character as a result of constructing the proposed water conveyance facilities.	--/ Adverse		--

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
16	ECON-4: Changes in local government fiscal conditions as a result of constructing the proposed water conveyance facilities.	--/ Adverse		--
16	ECON-5: Effects on recreational economics as a result of constructing the proposed water conveyance facilities.	--/ Adverse	Mitigation Measure REC-2: Provide alternative bank fishing access sites Mitigation Measure BIO-72: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines Mitigation Measure AES-1b: Install visual barriers between construction work areas and sensitive receptors Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area reclamation plan Mitigation Measure AES-1d: Restore barge unloading facility sites once decommissioned Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities Mitigation Measure AES-1g: Implement best management practices to implement project landscaping plan Mitigation Measure AES-4a: Limit construction to daylight hours within 0.25 mile of residents Mitigation Measure AES-4b: Minimize fugitive light from portable sources used for construction Mitigation Measure AES-4c: Install visual barriers along access routes, where necessary, to prevent light spill from truck headlights toward residences Mitigation Measure TRANS-1a: Implement site-specific traffic management plan Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments Mitigation Measure TRANS-1c: Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments Mitigation Measure NOI-1a: Employ noise-reducing construction practices during construction Mitigation Measure NOI-1b: Prior to construction, initiate a complaint/response tracking program	--
16	ECON-6: Effects on agricultural economics in the Delta region during construction of the proposed water conveyance facilities.	--/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible MM AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach	--

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
16	ECON-7: Permanent effects on regional economics in the Delta region as a result of operation and maintenance of the proposed water conveyance facilities.	--/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible MM AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach	--
16	ECON-8: Permanent effects on population and housing in the Delta region during operation and maintenance of the proposed water conveyance facilities	Less than significant/ Not adverse		Less than significant
16	ECON-9: Changes in community character during operation and maintenance of the proposed water conveyance facilities	--/ Adverse		--
16	ECON-10: Changes in local government fiscal conditions during operation and maintenance of the proposed water conveyance facilities.	--/ Adverse		--
16	ECON-11: Effects on recreational economics during operation and maintenance of the proposed water conveyance facilities	--/ Not adverse		--
16	ECON-12: Permanent effects on agricultural economics in the Delta region as a result of operation and maintenance of the proposed water conveyance facilities.	--/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible MM AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach	--
16	ECON-13: Effects on the Delta region’s economy due to the implementationof the proposed Conservation Measures 2-22	--/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible MM AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach	--
16	ECON-14: Effects on population and housing in the Delta region as a result of implementing the proposed Conservation Measures 2-22	Less than significant/ Adverse		Less than significant
16	ECON-15: Changes in community character as a result of implementing the proposed Conservation Measures 2-22	--/ Adverse		--

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
16	ECON-16: Changes in local government fiscal conditions as a result of implementing the proposed Conservation Measures 2-22	--/ Adverse		--
16	ECON-17: Effects on recreational economics as a result of implementing the proposed Conservation Measures 2-22	--/ Adverse		--
16	ECON-18: Effects on agricultural economics in the Delta region as a result of implementing the proposed Conservation Measures 2-22	--/ Adverse	Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to preserve agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1a: Preserve agricultural productivity of Important Farmland to the extent feasible MM AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones MM AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach	--
17	AES-1: Substantial alteration in existing visual quality or character during construction of conveyance facilities	Significant/ Adverse	Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines where feasible Mitigation Measure AES-1b: Install visual barriers between construction work areas and sensitive receptors Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area management plan Mitigation Measure AES-1d: Restore barge unloading facility sites once decommissioned Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities Mitigation Measure AES-1g: Implement best management practices to implement project landscaping plan	Significant and unavoidable
17	AES-2: Permanent effects on a scenic vista from presence of conveyance facilities.	Significant/ Adverse	Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area reclamation plan Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible	Significant and unavoidable
17	AES-3: Permanent damage to scenic resources along a state scenic highway from construction of conveyance facilities	Significant/ Adverse	Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible	Significant and unavoidable

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
17	AES-4: Creation of a new source of light or glare that would adversely affect views in the area as a result of construction and operation of conveyance facilities.	Significant/ Adverse	Mitigation Measure AES-4a: Limit construction to daylight hours within 0.25 mile of residents Mitigation Measure AES-4b: Minimize fugitive light from portable sources used for construction Mitigation Measure AES-4c: Install visual barriers along access routes, where necessary, to prevent light spill from truck headlights toward residences	Significant and unavoidable
17	AES-5: Substantial alteration in existing visual quality or character during operation.	Less than significant/ Not adverse		Less than significant
17	AES-6: Substantial alteration in existing visual quality or character during construction of CM2–CM22.	Significant/ Adverse	Mitigation Measure AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines Mitigation Measure AES-1b: Install visual barriers between construction work areas and sensitive receptors Mitigation Measure AES-1c: Develop and implement a spoil/borrow and tunnel muck area management plan Mitigation Measure AES-1d: Restore barge unloading facility sites once decommissioned Mitigation Measure AES-1e: Apply aesthetic design treatments to all structures to the extent feasible Mitigation Measure AES-1f: Locate concrete batch plants and fuel stations away from sensitive visual resources and receptors and restore sites upon removal of facilities Mitigation Measure AES-1g: Implement best management practices to implement project landscaping plan Mitigation Measure AES-4a: Limit construction to daylight hours within 0.25 mile of residents Mitigation Measure AES-4b: Minimize fugitive light from portable sources used for construction Mitigation Measure AES-4c: Install visual barriers along access routes, where necessary, to prevent light spill from truck headlights toward residences Mitigation Measure AES-6a: Underground new or relocated utility lines where feasible Mitigation Measure AES-6b: Develop and implement an afterhours low-intensity and lights off policy Mitigation Measure AES-6c: Implement a comprehensive visual resources management plan for the Delta and study area	Significant and unavoidable
17	AES-7: Compatibility of the proposed water conveyance facilities and other conservation measures with federal, state, or local plans, policies, or regulations addressing aesthetics and visual resources	--		--
18	CUL-1: Effects on identified archaeological sites resulting from construction of conveyance facilities	Significant/ Adverse	Mitigation Measure CUL-1: Prepare a data recovery plan and perform data recovery excavations on the affected portion of the deposits of identified and significant archaeological sites	Significant and unavoidable
18	CUL-2: Effects on archaeological sites to be identified through future inventory efforts	Significant/ Adverse	Mitigation Measure CUL-2: Conduct inventory, evaluation, and treatment of archaeological resources	Significant and unavoidable
18	CUL-3: Effects on archaeological sites that may not be identified through inventory efforts	Significant/ Adverse	Mitigation Measure CUL-3: Implement an archaeological resources discovery plan, perform training of construction workers, and conduct construction monitoring	Significant and unavoidable
18	CUL-4: Effects on buried human remains damaged during construction	Significant/ Adverse	Mitigation Measure CUL-4: Follow state and federal law governing human remains if such resources are discovered during construction	Significant and unavoidable
18	CUL-5: Direct and indirect effects on eligible and potentially eligible historic architectural/built environment-resources resulting from construction activities	Significant/ Adverse	Mitigation Measure CUL-5: Implement a built environment treatment plan, consult with relevant parties	Significant and unavoidable

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
18	CUL-6: Direct and indirect effects on unidentified and unevaluated historic architectural/built environment resources resulting from construction activities	Significant/ Adverse	Mitigation Measure CUL-6: Conduct a survey of inaccessible properties to assess eligibility, determine if these properties will be adversely impacted by the project, and include the treatment of these properties in the mitigation plans for known properties to resolve or mitigate adverse impacts.	Significant and unavoidable
18	CUL-7: Effects of other conservation measures on cultural resources	Significant/ Adverse	Mitigation Measure CUL-7: Conduct cultural resource studies and adopt cultural resource mitigation measures for cultural resource impacts associated with conservation measures 2-22 implementation	Significant and unavoidable
18	CUL-8: Compatibility of the proposed water conveyance facilities and other conservation measures with plans and policies	--		--
19	TRANS-1: Increased construction vehicle trips resulting in unacceptable LOS conditions	Significant/ Adverse	Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments Mitigation Measure TRANS-1c: Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments	Significant and unavoidable (Less than significant/ Not adverse if necessary agreements completed before project contribution to effect)
19	TRANS-2: Increased construction vehicle trips exacerbating unacceptable pavement conditions	Significant/ Adverse	Mitigation Measure TRANS-2a: Prohibit construction activity on physically deficient roadway segments Mitigation Measure TRANS-2b: Limit construction activity on physically deficient roadway segments Mitigation Measure TRANS-2c: Improve physical condition of affected roadway segments as stipulated in mitigation agreements or encroachment permits	Significant and unavoidable (Less than significant/ Not adverse if mitigation agreement(s) or encroachment permit(s) providing for improvement or replacement of pavement obtained and any other necessary agreements completed)
19	TRANS-3: Increase in safety hazards, including interference with emergency routes during construction	Significant/ Adverse	Mitigation Measure TRANS-1c: Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments	Significant and unavoidable (Less than significant/ Not adverse if all improvements required to avoid adverse effects prove feasible and any necessary agreements completed before project's contribution to effect)
19	TRANS-4: Disruption of marine traffic during construction	Less than significant/ Not adverse	Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan	Less than significant
19	TRANS-5: Disruption of rail traffic during construction.	Less than significant/ Not adverse	Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan	Less than significant
19	TRANS-6: Disruption of transit service during construction.	Significant/ Adverse	Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments Mitigation Measure TRANS-1c: Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments	Significant and unavoidable (Less than significant/ Not adverse if improvements identified in mitigation agreement(s) fully funded and constructed before project's contribution to effect)
19	TRANS-7: Interference with bicycle routes during construction.	Significant/ Adverse	Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan	Less than significant
19	TRANS-8: Increased traffic volumes and delays during operations and maintenance.	Less than significant/ Not adverse		Less than significant
19	TRANS-9: Permanent alteration of transportation patterns during operations and maintenance.	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
19	TRANS-10: Increased traffic volumes during construction of CM2–CM22.	Significant/ Adverse	Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan Mitigation Measure TRANS-1b: Limit hours or amount of construction activity on congested roadway segments Mitigation Measure TRANS-1c: Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments	Significant and unavoidable (Less than significant/ Not adverse if necessary agreements completed before project contribution to effect)
19	TRANS-11: Compatibility of the proposed water conveyance facilities and	--		--
20	UT-1: Increased demand on law enforcement, fire protection, and emergency response services from new workers in the Plan Area as a result	Less than significant/ Not adverse		Less than significant
20	UT-2: Displacement of public service facilities as a result of constructing the proposed water conveyance facilities.	Less than significant/ Not adverse (as long as coordination with Courtland FPD were successful)	Mitigation Measure UT-2: Ensure the continuation of fire protection services by the Courtland Fire Protection District	Less than significant
20	UT-3: Effects on public schools as a result of constructing the proposed	Less than significant/ Not adverse		Less than significant
20	UT-4: Effects on water or wastewater treatment services and facilities as a result of constructing the proposed water conveyance facilities.	Less than significant/ Not adverse		Less than significant
20	UT-5: Effects on landfills as a result of solid waste disposal needs during construction of the proposed water conveyance facilities.	Less than significant/ Not adverse		Less than significant
20	UT-6: Effects on regional or local utilities as a result of constructing the proposed water conveyance facilities.	Significant/ Adverse	Mitigation Measure UT-6a: Verify locations of utility infrastructure Mitigation Measure UT-6b: Relocate utility infrastructure in a way that avoids or minimizes any effect on operational reliability Mitigation Measure UT-6c: Relocate utility infrastructure in a way that avoids or minimizes any effect on worker and public health and safety	Significant and unavoidable (Less than significant/ Not adverse if coordination with all appropriate utility providers and local agencies to integrate with other construction projects and minimize disturbance to communities successful)
20	UT-7: Effects on public services and utilities as a result of operation and maintenance of the proposed water conveyance facilities.	Less than significant/ Not adverse		Less than significant
20	UT-8: Effects on public services and utilities as a result of implementing the proposed CM2-CM11	Significant/ Adverse	Mitigation Measure UT-6a: Verify locations of utility infrastructure Mitigation Measure UT-6b: Relocate utility infrastructure in a way that avoids or minimizes any effect on operational reliability Mitigation Measure UT-6c: Relocate utility infrastructure in a way that avoids or minimizes any effect on worker and public health and safety	Significant and unavoidable
21	ENG-1: Wasteful or inefficient energy use for temporary construction activities	Less than significant/ Not adverse		Less than significant
21	ENG-2: Wasteful or inefficient energy use for pumping and conveyance	Less than significant/ Not adverse		Less than significant
21	ENG-3: Compatibility of the proposed water conveyance facilities and CM2–CM22 with plans and policies	--		--
22	AQ-1: Generation of criteria pollutants in excess of the YSAQMD thresholds during construction of the proposed water conveyance facility.	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
22	AQ-2: Generation of criteria pollutants in excess of the SMAQMD thresholds during construction of the proposed water conveyance facility.	Significant/ Adverse.	<p>Mitigation Measure AQ-2a: Mitigate and offset construction-generated criteria pollutant emissions within the SMAQMD/SFNA to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SMAQMD CEQA thresholds for other pollutants</p> <p>Mitigation Measure AQ-2b: Develop an alternative or complementary off-site mitigation program to mitigate and offset construction-generated criteria pollutant emissions within the SMAQMD/SFNA to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SMAQMD CEQA thresholds for other pollutants</p>	Significant and unavoidable
22	AQ-3: Generation of criteria pollutants in excess of the BAAQMD thresholds during construction of the proposed water conveyance facility.	Significant/ Adverse.	<p>Mitigation Measure AQ-3a: Mitigate and offset construction-generated criteria pollutant emissions within BAAQMD/SFBAAB to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable BAAQMD CEQA thresholds for other pollutants</p> <p>Mitigation Measure AQ-3b: Develop an alternative or complementary off-site mitigation program to mitigate and offset construction-generated criteria pollutant emissions within the BAAQMD/SFBAAB to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable BAAQMD CEQA thresholds for other pollutants</p>	Less than significant
22	AQ-4: Generation of criteria pollutants in excess of the SJVAPCD thresholds during construction of the proposed water conveyance facility.	Significant/ Adverse.	<p>Mitigation Measure AQ-4a: Mitigate and offset construction-generated criteria pollutant emissions within SJVAPCD/SJVAB to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SJVAPCD CEQA thresholds for other pollutants</p> <p>Mitigation Measure AQ-4b: Develop an alternative or complementary off-site mitigation program to mitigate and offset construction-generated criteria pollutant emissions within the SJVAPCD/SJVAB to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SJVAPCD CEQA thresholds for other pollutants</p>	Less than significant
22	AQ-5: Generation of criteria pollutants in excess of the YSAQMD thresholds from operation and maintenance of the proposed water conveyance facility.	Less than significant/ Not adverse		Less than significant
22	AQ-6: Generation of criteria pollutants in excess of the SMAQMD thresholds from operation and maintenance of the proposed water conveyance facility.	Less than significant/ Not adverse		Less than significant
22	AQ-7: Generation of criteria pollutants in excess of the BAAQMD thresholds from operation and maintenance of the proposed water conveyance facility.	Less than significant/ Not adverse		Less than significant
22	AQ-8: Generation of criteria pollutants in excess of the SJVAPCD thresholds from operation and maintenance of the proposed water conveyance facility.	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
22	AQ-9: Generation of criteria pollutants in the excess of federal de minimis thresholds from construction and operation and maintenance of the proposed water conveyance facility.	Significant/ Adverse	Mitigation Measure AQ-2a: Mitigate and offset construction-generated criteria pollutant emissions within the SMAQMD/SFNA to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SMAQMD CEQA thresholds for other pollutants Mitigation Measure AQ-2b: Develop an alternative or complementary off-site mitigation program to mitigate and offset construction-generated criteria pollutant emissions within the SMAQMD/SFNA to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SMAQMD CEQA thresholds for other pollutants Mitigation Measure AQ-4a: Mitigate and offset construction-generated criteria pollutant emissions within SJVAPCD/SJVAB to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SJVAPCD CEQA thresholds for other pollutants Mitigation Measure AQ-4b: Develop an alternative or complementary off-site mitigation program to mitigate and offset construction-generated criteria pollutant emissions within the SJVAPCD/SJVAB to net zero (0) for emissions in excess of General Conformity de minimis thresholds (where applicable) and to quantities below applicable SJVAPCD CEQA thresholds for other pollutants	Less than significant
22	AQ-10: Exposure of Sensitive Receptors to Health Risks in Excess of YSAQMD's Health-Risk Assessment Thresholds	Less than significant/ Not adverse		Less than significant
22	AQ-11: Exposure of Sensitive Receptors to Health Risks in Excess of SMAQMD's Health-Risk Assessment Thresholds	Less than significant/ Not adverse		Less than significant
22	AQ-12: Exposure of Sensitive Receptors to Health Risks in Excess of SJVAPCD's Health-Risk Assessment Thresholds	Less than significant/ Not adverse		Less than significant
22	AQ-13: Exposure of Sensitive Receptors to Health Risks in Excess of BAAQMD's Health-Risk Assessment Thresholds	Less than significant/ Not adverse		Less than significant
22	AQ-14: Creation of potential odors affecting a substantial number of people during construction of the proposed water conveyance facility	Less than significant/ Not adverse		Less than significant
22	AQ-15: Generation of cumulative greenhouse gas emissions during construction of the proposed water conveyance facility	Significant/ Adverse	AQ-15: Develop and Implement a GHG Mitigation Program to Reduce Construction Related GHG Emissions to Net Zero (0)	Less than significant
22	AQ-16: Generation of cumulative greenhouse gas emissions from operation and maintenance of the proposed water conveyance facility and increased pumping	Less than significant/ Not adverse		Less than significant
22	AQ-17: Generation of cumulative greenhouse gas emissions from increased CVP pumping as a result of implementation of CM1	Significant/ Adverse	No feasible or available mitigation	Significant and unavoidable
22	AQ-18: Generation of criteria pollutants from implementation of CM2–CM11	Significant/ Adverse	AQ-18: Develop an Air Quality Mitigation Plan (AQMP) to ensure air district regulations and recommended mitigation are incorporated into future conservation measures and associated project activities.	Significant and unavoidable
22	AQ-19: Generation of cumulative greenhouse gas emissions from implementationof CM2–CM11	Significant/ Adverse	AQ-18: Develop an Air Quality Mitigation Plan (AQMP) to ensure air district regulations and recommended mitigation are incorporated into future conservation measures and associated project activities. AQ-19 Prepare a land use sequestration analysis to quantify and mitigate (as needed) GHG flux associated with conservation measures and associated project activities	Significant and unavoidable

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
23	NOI-1: Exposure of noise-sensitive land uses to noise from construction of water conveyance facilities	Significant/ Adverse.	NOI-1a: Employ noise-reducing construction practices during construction, NOI-1b: Prior to construction, initiate a complaint/response tracking program	Significant and unavoidable
23	NOI-2: Exposure of sensitive receptors to vibration or groundborne noise from construction of water conveyance facilities	Significant/ Adverse.	NOI-2: Employ vibration-reducing construction practices during construction of water conveyance facilities	Significant and unavoidable
23	NOI-3: Exposure of noise-sensitive land uses to noise from operation of water conveyance facilities	Significant/ Adverse	NOI-3: Design and construct intake facilities and other pump facilities such that operational noise does not exceed 50 dBA (one-hour Leq) during daytime hours (7:00 a.m. to 10:00 p.m.) or 45 dBA (one-hour Leq) during nighttime hours (10:00 p.m. to 7:00 a.m.) or the applicable local noise standard (whichever is less) at nearby noise sensitive land uses	Less than significant
23	NOI-4: Exposure of noise-sensitive land uses to noise from implementation of proposed Conservation Measures 2-10	Significant/ Adverse	NOI-1a: Employ noise-reducing construction practices during construction, NOI-1b: Prior to construction, initiate a complaint/response tracking program	Significant and unavoidable
24	HAZ-1: Create a substantial hazard to the public or the environment through the release of hazardous materials or by other means during construction of the water conveyance facilities	Significant/ Adverse	Mitigation Measure HAZ-1a: Perform preconstruction surveys, including soil and groundwater testing, at known or suspected contaminated areas within the construction footprint, and remediate and/or contain contamination Mitigation Measure HAZ-1b: Perform pre-demolition surveys for structures to be demolished within the construction footprint, characterize hazardous materials and dispose of them in accordance with applicable regulations Mitigation Measure UT-6a: Verify locations of utility infrastructure Mitigation Measure UT-6c: Relocate utility infrastructure in a way that avoids or minimizes any effect on worker and public health and safety Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan	Less than significant
24	HAZ-2: Expose sensitive receptors located within 0.25 miles of a construction site to hazardous materials, substances, or waste during construction of the water conveyance facilities	No impact/ Not adverse		No impact
24	HAZ-3: Potential to conflict with a known hazardous materials site and, as a result, create a significant hazard to the public or the environment	No impact/ Not adverse		No impact
24	HAZ-4: Result in a safety hazard associated with an airport or private airstrip within 2 miles of the water conveyance facilities footprint for people residing or working in the study area during construction of the water conveyance facilities	Less than significant/ Not adverse		Less than significant
24	HAZ-5: Expose people or structures to a substantial risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, as a result of construction, and operation and maintenance of the water conveyance facilities	Less than significant/ Not adverse		Less than significant
24	HAZ-6: Create a substantial hazard to the public or the environment through the release of hazardous materials or by other means during operation and maintenance of the water conveyance facilities	Less than significant/ Not adverse	Mitigation Measure HAZ-6: Test dewatered solids from solids lagoons and dredged sediment prior to reuse and/or disposal	Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
24	HAZ-7: Create a substantial hazard to the public or the environment through the release of hazardous materials or by other means as a result of implementing the conservation components	Less than significant/ Not adverse	Mitigation Measure HAZ-1a: Perform preconstruction surveys, including soil and groundwater testing, at known or suspected contaminated areas within the construction footprint, and remediate and/or contain contamination Mitigation Measure HAZ-1b: Perform pre-demolition surveys for structures to be demolished within the construction footprint, characterize hazardous materials and dispose of them in accordance with applicable federal, state and local regulations Mitigation Measure HAZ-6: Test dewatered solids from solids lagoons and dredged sediment prior to reuse and/or disposal Mitigation Measure UT-6a: Verify locations of utility infrastructure Mitigation Measure UT-6c: Relocate utility infrastructure in a way that avoids or minimizes any effect on worker and public health and safety Mitigation Measure TRANS-1a: Implement site-specific construction traffic management plan	Less than significant
24	HAZ-8: Increased risk of bird – aircraft strikes during implementation of conservation components that create or improve wildlife habitat	Significant/ Adverse	Mitigation Measure HAZ-8: Consult with individual airports and USFWS, and relevant regulatory agencies	Significant and unavoidable
25	PH-1: Increase in vector-borne diseases as a result of construction and operation of the intakes, solids lagoons, and/or sediment basins associated with the water conveyance facilities.	Less than significant/ Not adverse		Less than significant
25	PH-2: Exceedances of water quality criteria for constituents of concern such that there is an adverse effect on public health as a result of operation of the water conveyance facilities.	Significant/ Adverse	Mitigation Measure WQ-5: Avoid, minimize, or offset, as feasible, adverse water quality conditions	Significant and unavoidable (Less than significant if all financial contributions, technical contributions, or partnerships required to avoid significant impacts prove feasible and any necessary agreements completed before project's contribution to effect)
25	PH-3: Substantial mobilization or increase in constituents known to bioaccumulate as a result of construction, operation or maintenance of the water conveyance facilities.	Less than significant/ Not adverse		Less than significant
25	PH-4: Expose substantially more people to transmission lines generating new sources of EMFs as a result of the operation of the water conveyance facilities.	Less than significant/ Not adverse		Less than significant
25	PH-5: Increase in vector-borne diseases as a result of implementing CM3-CM7, CM10 and CM11	Less than significant/ Not adverse		Less than significant
25	PH-6: Substantial increase in recreationists’ exposure to pathogens as a result of implementing the restoration conservation measures	Less than significant/ Not adverse		Less than significant
25	PH-7: Substantial mobilization of or increase in constituents known to bioaccumulate as a result of implementing CM2, CM4, CM5, and CM10	Less than significant/ Not adverse		Less than significant
26	MIN-1: Loss of availability of locally important natural gas wells as a result of constructing the water conveyance facilities	Less than significant/ Not adverse		Less than significant

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Ch.	Resource Topic/Impact	Level of Significance before Mitigation	Mitigation Measure	CEQA Level of Significance after Mitigation
26	MIN-2: Loss of availability of extraction potential from natural gas fields as a result of constructing the water conveyance facilities	Less than significant/ Not adverse		Less than significant
26	MIN-3: Loss of availability of locally important natural gas wells as a result of operation and maintenance of the water conveyance facilities	Less than significant/ Not adverse		Less than significant
26	MIN-4: Loss of availability of natural gas fields as a result of operation and maintenance of the water conveyance facilities	No impact/ Not adverse		No impact
26	MIN-5: Loss of availability of locally important natural gas wells as a result of implementing Conservation Measures 2-22	Significant/ Adverse.	Mitigation Measure MIN-5: Design Conservation Measures 4, 5, and 10 to avoid displacement of active natural gas wells to the extent feasible	Significant and unavoidable
26	MIN-6: Loss of availability of extraction potential from natural gas fields as a result of implementing Conservation Measures 2-22	Significant/ Adverse.	Mitigation Measure MIN-6: Design Conservation Measures 4, 5, and 10 to maintain drilling access to natural gas fields to the extent feasible	Significant and unavoidable
26	MIN-7: Loss of availability of locally important aggregate resource sites (mines and MRZs) as a result of constructing the water conveyance facilities	No impact/ Not adverse		No impact
26	MIN-8: Loss of availability of known aggregate resources as a result of constructing the proposed water conveyance facilities	Less than significant/ Not adverse		Less than significant
26	MIN-9: Loss of availability of locally important aggregate resource sites (mines and MRZs) as a result of operation and maintenance of the water conveyance facilities	No impact/ Not adverse		No impact
26	MIN-10: Loss of availability of known aggregate resources as a result of operation and maintenance of the water conveyance facilities	Less than significant/ Not adverse		Less than significant
26	MIN-11: Loss of availability of locally important aggregate resource sites (mines and MRZs) as a result of implementing Conservation Measures 2-22	Significant/ Adverse	Mitigation Measure MIN-11: Purchase affected aggregate materials for use in BDCP construction	Less than significant
26	MIN-12: Loss of availability of known aggregate resources as a result of implementing Conservation Measures 2-22	Less than significant/ Not adverse		Less than significant
27	PALEO-1: Destruction of unique paleontological resources as a result of construction of water conveyance facilities.	Significant/ Adverse	Mitigation Measure PALEO-1a: Prepare a monitoring and mitigation plan for paleontological resources Mitigation Measure PALEO-1b: Review 90% design submittal and develop specific language identifying how the mitigation measures will be implemented along the alignment Mitigation Measure PALEO-1c: Educate construction personnel in recognizing fossil material Mitigation Measure PALEO-1d: Collect and preserve substantial potentially unique or significant fossil remains when encountered	Significant and unavoidable
27	PALEO-2: Destruction of unique paleontological resources associated with the construction of other conservation measures.	Significant/ Adverse	Mitigation Measure PALEO-1a: Prepare a monitoring and mitigation plan for paleontological resources Mitigation Measure PALEO-1b: Review 90% design submittal and develop specific language identifying how the mitigation measures will be implemented along the alignment Mitigation Measure PALEO-1c: Educate construction personnel in recognizing fossil material Mitigation Measure PALEO-1d: Collect and preserve substantial potentially unique or significant fossil remains when encountered	Less than significant